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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,944	08/04/2003	John Kolhjoern Roedseth	DN2003129	5204
27280	7590	05/03/2005	EXAMINER	
THE GOODYEAR TIRE & RUBBER COMPANY INTELLECTUAL PROPERTY DEPARTMENT 823 1144 EAST MARKET STREET AKRON, OH 44316-0001			KNABLE, GEOFFREY L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,944

Applicant(s)

ROEDSETH ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5 and 6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-4-2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a method of building a tire, classified in class 156, subclass 132.
 - II. Claims 5-6, drawn to a tire building drum, classified in class 156, subclass 415.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the method as claimed can be practiced by another materially different apparatus such as a tire building drum that does not include support rings that move under central segments. Also, the tire building drum could be used to practice other processes such as effecting turn-up without central drum expansion.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with June Rickey on April 26, 2005 a provisional election was made with traverse to prosecute the invention of group II, claims 5-6. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-4 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 does not include any punctuation between clauses and further the indented parts that arguably substitute for punctuation break the claim up in confusing ways (e.g. lines 3-5). It is suggested appropriate punctuation be added to avoid confusion. It is also noted that the "A" should be changed to "a" at line 2 of claim 5.

At line 5 of claim 6, it appears that "one" should be "cone".

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Baldoni et al. (US 6,360,802).

As to claim 5, Baldoni et al. discloses a tire building drum comprising a pair of inflatable turnup bladders (58), a central segment support mechanism having a plurality of radially expandable segments (50) covered by the inflatable pair of turnup bladders, a pair of bead locks (43), a pair of support rings (49), each support ring (49) being positioned between the radially expandable segments (50) and a bead lock (43) and wherein as the segments expand and the bead locks move axially inwardly the support rings move under the segments (e.g. compare figs. 2 and 3). As to claim 6, Baldoni et al. also has a central screw (11) for axial movement of the pneumatic driven bead locks (e.g. note pistons 37) and further, segments (50) are connected to conical surface (52). This reference would therefore anticipate the requirements of each of claims 5 and 6.

9. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over [Caretta (US 3,598,673) or Landsness (US 4,780,170) or Olbert et al. (US 3,853,653 - for claim 5 only)] taken in view of at least one of Baldoni et al. (US 6,360,802) and Kneip (US 4,976,804).

As to claim 5, Caretta discloses a tire building drum comprising an inflatable turnup bladder (67), a central segment support mechanism having a plurality of radially expandable segments (7/8) covered by the inflatable turnup bladder, a pair of bead locks (part of 49/50), a pair of support rings (the part of 49/50 axially inward of the bead lock areas), each support ring being positioned between the radially expandable segments and bead lock and wherein as the segments expand and the bead locks move axially inwardly the support rings move under the segments (e.g. compare figs. 9 and 10). Caretta thus discloses a tire building drum as in claim 5 except that the turnup

Art Unit: 1733

bladders that are at each side of the drum are in the form of a single complete bladder rather than a pair of turnup bladders as claimed. It however is known in this art to provide a tire building drum that includes turnup bladders, as well as bladder portions that cover the main drum segments, in the form of separate bladders rather than a single axially continuous bladders as in Caretta - note for example Baldoni et al. and Kneip, both of these references exemplifying the known expedient in this art of providing the turn-up bladder as separate elements. Such would also be expected to avoid the need for complete bladder replacement when only part of the bladder is damaged. To provide separate turn-up bladders rather than a single continuous bladder would therefore have been obvious in this art.

Similarly, Landsness discloses a tire building drum comprising a rubber sleeve (22), a central segment support mechanism having a plurality of radially expandable segments (36) covered by the sleeve, a pair of bead locks (54), a pair of support rings (e.g. 34), each support ring (34) being positioned between the radially expandable segments (36) and a bead lock (54) and wherein as the segments expand and the bead locks move axially inwardly the support rings move under the segments (e.g. compare figs. 3 and 4). Landsness thus discloses a tire building drum as in claim 5 except that turn-up bladders are not explicitly suggested. Landsness does however suggest that the turn-up is effected "in a conventional manner" (col. 5, lines 13-15), it being well known, conventional and obvious in this art to utilize turn-up bladders to effect carcass turnup. Further, in this art, tire building drums that include turnup bladders also conventionally include bladder portions that cover the main drum segments - note for

Art Unit: 1733

example Baldoni et al. and Kneip, both of these references exemplifying the known expedient in this art of providing turn-up bladders as separate elements that also include portions extended over the main drum segments. To provide separate turn-up bladders including parts thereof that cover part of the main drum segments would therefore have been obvious in this art.

Similarly, Olbert et al. discloses a tire building drum comprising a pair of turn-up bladders (6), a central segment support mechanism having a plurality of radially expandable segments (17), a pair of bead locks (21), a pair of support rings (18), each support ring (18) being positioned between the radially expandable segments (17) and a bead lock (21) and wherein as the segments expand and the bead locks move axially inwardly the support rings move under the segments (e.g. compare figs. 2 and 3).

Olbert et al. thus discloses a tire building drum as in claim 5 except that separate inflatable bladders cover the central segments rather than being covered by part of the turn-up bladders as claimed. However, in this art, tire building drums that include turnup bladders also conventionally include portions of these turn-up bladders that cover the main drum segments - note for example Baldoni et al. and Kneip, both of these references exemplifying the known expedient in this art of providing turn-up bladders as separate elements that also include portions extended over the main drum segments. To provide separate turn-up bladders including parts thereof that cover part of the main drum segments would therefore have been an obvious alternative bladder configuration in this art.

As to claim 6, in Caretta, the segments (7/8) are connected to a conical surface (axially inward surface of 49/50) but the axial and radial movements are effected using rack and pinion and cams rather than a central screw and fluid cylinders. It however is considered to have been obvious to adopt or adapt any conventional and well known means to effect desired radial and axial movements in a tire building drum, it being considered to have been an obvious alternative to use a screw/pressure cylinders - note Baldoni et al. also has a central screw (11) for axial movement of the pneumatic driven bead locks (e.g. note pistons 37) and further, in similar manner to Caretta, segments (50) are connected to conical surface (52). Kneip further evidences the well known use of central screws for symmetrical axial movement of bead locks. To include such in a drum as in Caretta is therefore considered to have been an obvious alternative expedient to effect the same movements.

Likewise, as to claim 6, in Landsness, note conical surface on "34" that apparently engages the center segments as well as screw 58 for axial movement of sleeves 41 and thus bead locks. Further, the bead locks are pneumatic/fluid driven (e.g. note bladder 44).

Olbert et al. has not been applied against claim 6 as there is no reasonable suggestion to engage axially movable cone mechanisms as claimed

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Farinola (US 6,615,891) discloses a tire building drum that includes a support ring that can move axially inward under a central body (fig. 2) but this reference does not include radially expandable center segments covered as claimed.

Nojiri et al. (US 5,268,057) discloses a tire building drum including side parts that move axially inwardly under center segments (e.g. compare figs. 2 and 3) but does not teach or render obvious having the central segments covered by the inflatable pair of turn-up bladders.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
April 29, 2005